

REMARKS

In the Office Action, Claims 13-24 were rejected as obvious under 35 U.S.C. § 103 (a). Claims 13-24 remain following entry of the instant Amendment.

Via this Amendment, Claim 13 is amended to identify specific types of water dispersible and water soluble esters preferred in the practice of the present invention, their HLB properties, and the concentration of the esters in the compositions used in connection with the claimed hair treatment method. Additionally, Claim 13 has been amended to set forth the concentration range of the silicone elastomer. Support for these amendments is found in the specification at Claims 15, 17, 18, and 24 as originally filed; page 5, lines 8-9, page 8, lines 1-5, page 8, lines 8-15, and page 9, lines 19-22.

The amendment to Claim 13 also more particularly points out that the method of the present invention involves application to scalp hair and that the composition applied to the scalp hair is a non-emulsion composition. Support for application to hair of the scalp is found at page 12, first full paragraph. Support for the non-emulsion form of the composition is found in independent Claim 1 as originally filed.

Additionally, Claim 24 is amended similarly to more specifically point out that the method involves application to scalp hair and to also set forth the amount of the silicone elastomer present in the compositions used in the practice of the claimed method.

Claims 15, 18, and 19 are also amended. No new matter is added via this Amendment.

Rejections Under 35 U.S.C. § 103(a)

A. Claims 13-16, 19-24 remain rejected under 35 U.S.C. § 103(a) as defining subject matter allegedly obvious over U.S. Patent Application No. 2003-0049212 to Robinson, *et al.* (hereinafter "Robinson").

The Office Action states that Robinson teaches skin care compositions to treat skin and hair comprising silicone elastomers, which include an organopolysiloxane silicone dimethicone/vinyl dimethicone crosspolymer. The Office Action further states that Robinson's compositions can be in the form of an emulsion comprising an emulsifier for dispersing the aqueous phase, which emulsifier has an HLB of less than 14, preferably from 4 to 14. The Examiner refers to the specification of Robinson as disclosing a silicone emulsifier or a non-silicone emulsifier including sugar esters and polyesters, alkoxylated derivatives of C1-C30 fatty acid esters, and polyglycerol esters of C1-C30 fatty acids.

The Examiner further alleges that the "... instant claims do not recite any requirements for the composition to have any specific sensory tactile perception ratings or any requirements for the absorption of sebum." The Office asserts that even if the claims recited the requirement to deter sebum buildup,

"Robinson teaches the same silicone elastomer as the critical ingredient, applied to the same substrate, i.e., hair. Therefore, Robinson's composition would necessarily perform the same function as claimed. The fact that applicant found an inherent mechanism of the prior art does not distinguish the instant invention from the prior art."

Applicants traverse this ground of rejection and contests its rationale as may be applied to the amended claims.

The present inventors have surprisingly found that the combination of the water dispersible or water soluble esters specified in Claims 13 and 24 together with the silicone elastomers in non-emulsion hair treatment compositions provides improved wet and dry hair properties while simultaneously preventing wicking of sebum up the shaft of the hair. By reducing sebum build-up, the hair stays cleaner for a longer period of time, while providing a smooth feel and long-lasting conditioning effects. This discovery is of particular importance to consumers who have oily hair, and is more than the predictable use of prior art elements according to their established functions.

The superior benefits of the present invention are manifestly illustrated by the comparative tests set forth in the examples in which the compositions of the claimed invention

(Composition D in each of the Examples, which contain both the silicone elastomer and the ester) were comparatively tested against compositions containing neither material (Compositions A); compositions containing the elastomer only (Compositions B), and compositions containing the ester only (Compositions C). Different esters were tested in each of the Examples 4, 5, and 6, and the hair swatches were measured for wet detangling, wet feel, wet combing after detangling, wet feel after combined, dry detangling and dry feel, with the cumulative scores being calculated. Different levels of the esters and the elastomers were evaluated as well. Compositions D containing both the elastomers and the esters of the present invention of the present application significantly outperformed Compositions A, B, and C in the aforementioned test categories. Accordingly, the Applicant submits that the present application provides a nonobvious hair care composition having a sebum absorbing benefit and which provides enhanced combing properties.

Independent Claims 13 and 24 are now directed to methods of treating hair with a non-emulsion composition, i.e., a suspension. Robinson on the other hand is directed to either emulsion compositions or to “substantially anhydrous” compositions having a minimal amount of water. The compositions used in the method of the present invention cannot be anhydrous since they require at least 20% water, as set forth in Claims 13 and 24.

Applicants further submit that nothing in the disclosure of Robinson suggests the nonobvious benefits that result from the treatment of hair using Applicants’ compositions containing the silicone elastomer and the specific esters identified in the independent claims. Robinson does not disclose any examples of specific compositions for application to hair. Moreover, Robinson is concerned only with the use of the emulsifiers recited at Paragraphs [0157] et seq. as emulsifiers to disperse the aqueous phase. Robinson enumerates an array of suitable emulsifiers, but fails to indicate why any particular class of emulsifier among those mentioned would be suitable in a hair treatment composition in combination with a silicone elastomer. In the present invention the compositions are not emulsions and one of ordinary skill in the art would not look to Robinson for the purpose of incorporating an emulsifier to provide a hair care composition having unexpected benefits. Applicant, on the other hand has set forth

ample reasons and test evidence why this combination is unexpectedly beneficial when used as a hair care composition in a method of treating hair.

As described at Paragraph [0029], the silicone elastomers of Robinson are useful components in skin care compositions to reduce the tackiness/stickiness associated with skin conditioning agents, including glycerin. At Paragraph [0030] Robinson describes the function of the silicone elastomer as that of exhibiting reduced visible residue and reduced stickiness when added to a composition having high levels of skin care actives and a nonvolatile solvent (i.e., glycerin).

In the present invention, the elastomers adhere to the hair shaft and possess three functions (as described at page 4, lines 21-24): (1) a protective coating for damaged hair, where the cuticle is broken; (2) provide smoothness by attaching to the hair; and (3) a sebum-absorbing effect. None of these functions are taught or suggested by Robinson. Robinson neither recognizes the problems solved by the present invention, nor teaches use of a composition to solve these problems.

Applicants respectfully disagree with the Examiner's statement that the present claims do not recite any requirements for the absorption of sebum. Independent Claims 13 and 24 clearly state the silicone elastomer is present " ... in an amount effective to deposit a sebum-absorbing level" Nonetheless, Applicant has amended Claims 13 and 24 to state that the elastomer is present in an amount of from about 0.01 to about 5 wt % by weight of the composition.

The Office alternatively states that even if the claims recite a sebum absorbent effect, the Robinson composition would inherently perform the same functions. Applicant submits that inherency is not applicable to an obviousness rejection under 35 U.S.C. § 103. Case law draws a clear distinction between anticipation by inherency and obviousness:

Inherency and obviousness are somewhat like oil and water – they do not mix well. Claimed subject matter can be anticipated because a prior art reference describes a method which inherently meets the limitations of a claimed method. Claimed subject matter can be unpatentable for obviousness when, notwithstanding a

difference between that subject matter and a prior art reference, the claimed subject matter, as a whole, would have been obvious. Ex Parte Schricker, 56 U.S.P.Q.2d. 1723 (Bd. Pat. App. & Interference 2000). See also In re Sporman, 363 F.2d 444, 448 (C.C.P.A. 1966) (stating “that which may be inherent is not necessarily known. Obviousness cannot be predicated on what is unknown.”)

Based on the above arguments distinguishing the present invention and that of the Robinson application, it is respectfully requested that the rejection be withdrawn.

B. Claims 17-18 remain rejected under 35 U.S.C. §103(a) as defining subject matter that is allegedly obvious over Robinson in combination with U.S. Patent No. 4,704,271 to Hourihan, *et al.* (“hereinafter “Hourihan”).

Pursuant to the rejection of Claims 17 and 18 under 35 U.S.C. § 103(a), the Office states that Robinson teaches nonionic surfactants including polyglycerol esters of C₁-C₃₀ fatty acids but does not teach the instantly claimed esters of Claims 17 and 18. The Office then relies on Hourihan to teach polyglyceryl-3-laurate at column 3, lines 55-68 as an emulsifying agent in emulsion antiperspirant stick compositions. The Office concludes that it would have been obvious to one of ordinary skill in the art to utilize polyglycerol-3 laurate disclosed by Hourihan since the Robinson reference suggests the use of polyglycerol esters of C₁-C₃₀ fatty acids as suitable emulsifying agents.

Applicants traverse this ground of rejection based on the arguments set forth above with regard to the Robinson reference, as Hourihan does not make up the deficiencies of the Robinson reference with regard to Claims 17 and 18.

Applicants further traverse this rejection and reiterate previous arguments that Hourihan is directed to non-analogous art, i.e., a solid antiperspirant stick. The Office applied the analogous art test of *In re Oetiker*, 977 F.2d 436, 230 USPQ 313 (Fed. Cir. 1986), which requires a reference to either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventors was concerned in order to rely on

that reference as a basis for rejection. The Office erroneously concludes that the Hourihan and Robinson references are analogous art because both are directed to cosmetic compositions, are in the field of Applicant's endeavor, and thus are reasonably pertinent to the problem with which the Applicant is concerned. Applicants disagree.

Hourihan is neither in the same field as the Applicant's endeavor nor is the reference reasonably pertinent to the problem of the present invention. The field of the present invention is hair care products. Hourihan teaches a product in a different form, i.e., a solid emulsion stick, for a different purpose, i.e., an antiperspirant, to be applied to a different site, i.e., underarms. Moreover, a person having ordinary skill in the art would not reasonably have expected to solve the problem of keeping hair cleaner for longer and absorbing sebum inasmuch as Hourihan teaches application of a w/o emulsion residue containing aluminum-zirconium salts to prevent wetness and odor.

Shampoos and conditioners are known to those in the art to be liquid compositions which rinse out. However, Hourihan is not directed to liquid preparations, nor liquid rinse-out hair preparations; nor non-emulsion compositions; nor preparations which function to solve the problem caused by the build-up of sebum on the surface of the hair and to keep hair cleaner for a longer period of time while maintaining a smooth feel and long-lasting conditioning effects. Hourihan is directed to leave-on compositions containing an antiperspirant salt that forms a residue where it is applied.

There is no suggestion or teaching in Hourihan for use of silicone elastomers to absorb sebum. Nor would one skilled in the art at the time of the invention faced with the issue of trying to deter the build-up of sebum while simultaneously to obtain improvement to hair quality post application, have looked to Hourihan for a solution to the present problem. Therefore, Applicants submit that Hourihan is non-analogous art.

Moreover, the Federal Circuit has stated:

"We have noted elsewhere, as a "useful general rule," that references that teach away cannot serve to create a *prima facie* case of obviousness.... If references taken in combination would produce a "seemingly inoperative

device,” we have held that such references teach away from the combination and thus cannot serve as predicates for a *prima facie* case of obviousness.” McGinley v. Franklin Sports Inc., 262 F. 3d 1339, 60 USPQ2d 1001, 1010 (Fed. Cir. 2001); In re Sponnoble, 405 F.2d 578, 587, 160 USPQ 237, 244 (C.C.P.A. 1969).

A reference is said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

Houriha actually teaches away from the present invention in that the composition is a w/o emulsion which leaves a sticky residue. A w/o emulsion teaches away from the present invention, which is a non-emulsion, and such teaching away is indicative of non-obviousness. The Office proposes a hypothetical combination utilizing the composition of Robinson with the water-in-oil emulsifying agent of Hourihan. However, the combination of Robinson and Hourihan does not arrive at the method of use of the non-emulsion hair care composition of present invention.

A *prima facie* case of obviousness requires the analysis supporting a rejection under 35 U.S.C. 103(a) to be made explicit, and that it was "important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the [prior art] elements" in the manner claimed. *KSR Int'l Co. v. Teleflex, Inc* (Opinion 04-1350; decided April 30, 2007). Moreover, the prior art reference or combined references must teach or suggest all the claim limitations.

Applicants submit that there is no rationale why one would have selected the Hourihan reference and combined it with Robinson. The present invention does not solve the same or even a similar problem to that taught by either Hourihan or Robinson. Nor has the problem of the present invention been identified anywhere in either these reference. Since the problem the present inventors have solved is different from the problem of the prior art, there is no reason to expect that one of ordinary skill in the art would associate the prior art with the solution to the present inventors' problem. Applicants submit that the Examiner has engaged in selective

picking and choosing to the portions of the references without full appreciation of the references as a whole. *See Bausch & Lomb, inc. v. Barnes-Hind/Hydrocurve, Inc.*, 796 F.2d 443 (Fed. Cir. 1986). The correct question is whether the prior references suggest the method of making the composition of the present invention, not whether parts of the present invention can be found in assorted references.

The Office also states that the Hourihan composition is applied to an area of the body that has hair. Applicants disagree with the Examiner's position, since the underarm area is prone to sweating rather than exudation of sebum. Nonetheless, Claims 13 and 24 have been amended to specifically define hair as being on the scalp.

In consideration of the differences between the present invention, the Robinson patent application, and the Hourihan patent, as explained above, it is submitted that the claims define subject matter that is patentable over the references cited, and withdrawal of the rejections is in order and is respectfully requested.

The above amendment and remarks establish the patentable nature of all the claims examined on the merits in the application. Notice of Allowance and passage to issue is therefore, respectfully solicited.

Respectfully submitted,

Date: October 25, 2007

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